

REMARKS

By the present amendment, dependent claims 16 and 17 have been added. The subject matter of newly added claims 16 and 17 finds support in the disclosure at page 11, lines 12 to 14; page 14, lines 6 to 11; page 20, lines 12 to 14; and the Examples. Entry of these amendments is respectfully requested.

In the Office Action, claims 6 and 7 were objected to as being improper multiple dependent claims. In particular, it apparently was alleged that multiple dependent claim 6 was improper, since a multiple dependent claim should refer to prior claims in the alternative. Reconsideration of this rejection in view of the following comments is respectfully requested.

In response, attention is directed to the provisions of Section 601(n) of the MPEP, as cited in the Action, which specifically sanctions the use of the language "any one of claims X to Y" as recited in claim 6. In particular, example Claim 8 of the "Acceptable Multiple Dependent Claim Wording" of this Section of the MPEP corresponds the language used in present dependent claim 6. Accordingly, withdrawal of the objection as to improper multiple dependent claims is respectfully requested.

Claims 1, 6 and 7 were rejected under 35 USC § 102(b) as being anticipated by the patent to Ohi et al. In making this rejection, it was asserted that the cited patent teaches the entire molding for an electrolytic capacitor as defined by independent claim 1. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. The subject invention provides a molding with a substratum, which has a molding having excellent workability, a production method therefor, a molding with a substratum for a sintering process, and a production method therefor. In addition, the subject invention provides a molding or a molding with a substratum for a sintering process having a molding with which a capacitor anode element with excellent electric properties can be obtained, and which has excellent workability that can be used to make a porous anode element for an electrolytic capacitor.

The molding for an electrolytic capacitor anode element according to claim 1 includes the following features:

- (a) valve action metal layer which includes valve action metal powder and binder resin is included;
- (b) the molding includes a region having resin as its main component for protecting the valve action metal layer in at least one surface of the molding.

In accordance with the feature (b), since the molding has a sheet-shaped region (protective layer) having resin as a main component, this region functions as the reinforcement of the molding, making it possible to prevent the molding from crumbling and the like as is set forth on page 6, lines 9 to 13 of the subject specification. Since this layer-shaped region (protective layer) having resin as a main component for protecting the porous-body-forming layer may be provided at a small portion of the surface region of the molding, it is possible to decrease the residual carbon in the sintered body. As a result, when this sintered body is then employed as a porous anode for an electrolytic capacitor, excellent electrical properties can be ensured for the electrolytic capacitor anode element as is set forth on page 6, lines 14 to 19 of the subject specification.

The molding for an electrolytic capacitor anode element according to claim 1 is a molding for a sintering process, that is, a molding before sintering to be made into a porous anode element. Therefore, the molding has valve action metal layer which includes essentially valve action metal powder and binder resin as indicated above for feature (a). A molding element 15 is formed from the molding according to claim 1, and by sintering the molding element 15, the binder resin is removed, and the valve action metal particles are fused together. As a consequence, an electrolytic capacitor anode element 18 is produced as is set forth on page 28, lines 6 to 17 of the subject specification. In the electrolytic capacitor anode element 18, the binder resin no longer exist, and the valve action metal particles are fused together and no longer exist in the form of powder. It is

submitted that such a molding or a molding with a substratum for a sintering process having a molding with which a capacitor anode element can be obtained is not taught or suggested by the cited patent Ohi et al.

More particularly, the patent to Ohi et al., as is set forth in column 2, lines 40 to 48 thereof, allegedly provides a solid electrolytic capacitor which is improved in volume efficiency and is superior in reliability in connection and a method for fabricating the same. According to column 5, lines 46 and 47 of the Ohi et al patent, it is directed to a solid electrolytic capacitor which includes an anode member such as the above-described electrolytic capacitor anode element 18.

In the subject rejection, it was asserted that the Ohi et al patent discloses a molding for an electrolytic capacitor anode element having valve action metal layer (figure 3) which includes valve action metal powder (31) and binder resin (33). The symbol 31 represents an anode member which is a sintered object of the valve metal powder formed by sintering the valve metal powder as is set forth in column 5, lines 46 to 47 of the Ohi et al patent, and is different from the valve action metal powder. The symbol 33 represents a solid electrolyte layer which is not a binder resin.

In summary, the subject rejection relates the anode member and the member in the vicinity thereof to features of the present invention which is a molding before sintering.

However, in the Ohi et al patent, there is no teaching or suggestion of the molding for an electrolytic capacitor anode element before sintering, especially the valve action metal powder and the binder resin.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of claims 1, 6 and 7 over the cited Ohi et al patent are respectfully requested.

Claims 1-3 and 6-8 were rejected under 35 USC § 102(b) as being anticipated by the patent to Taniguchi et al. In making this rejection, it was asserted that the cited patent teaches the entire molding with a substratum as defined by independent claim 2. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

The Taniguchi et al patent apparently provides a chip-type solid electrolyte capacitor which makes a good and reliable connection with an anode lead of a capacitor element and exhibits enhanced bonding strength when the capacitor is mounted on a printed circuit board as is set forth in column 2, lines 11 to 17 thereof. The Taniguchi et al patent is also directed to a solid electrolytic capacitor which includes an anode body such as the above-described electrolytic capacitor anode element 18.

It was asserted in the Action that the Taniguchi et al discloses a molding for an electrolytic capacitor anode element having valve action metal layer (figures 1 to 3) which includes valve action metal powder (12) and binder resin (16b). The symbol 12 represents an anode body which is thought to be a sintered object of the valve metal powder formed by sintering the valve metal powder, and is different from the valve action metal powder. The symbol 16b represents a solid electrolyte layer of, for example, manganese dioxide, as is set forth in column 3, lines 45 and 46, and the solid electrolyte layer is not a binder resin.

Thus, the above rejection is based on attempting to inaccurately relate an anode body and the member in the vicinity thereof to features of the subject invention which is a molding before sintering. The Taniguchi patent contains no description or suggestion of the molding for an electrolytic capacitor anode element before sintering, especially the valve action metal powder and the binder resin.

As described above, the molding for an electrolytic capacitor anode element of claim 1 is a molding before sintering. In contrast, in the Taniguchi et al patents, the anode member (anode body), which is a component of the chip-type solid electrolytic capacitor, is assembled in the electrolytic capacitor after sintering. Therefore, Therefore, the presently claimed invention differs from that disclosed in the Taniguchi et al patents in this important respect. That is, in the Taniguchi et al patent, there is no teaching or suggestion

of a valve action metal in the form of powder and binder resin which bonds the valve action metal powder.

With respect to the subject matter of independent claim 2, a brief review of the presently claimed invention as defined by independent claim 2 may be quite instructive. The molding with a substratum according to claim 2 has the following features:

- (c) a sheet-shaped substratum and a molding provided on the sheet-shaped substratum such that the molding can be separated are included;
- (d) the molding has a protective layer and a porous-body-forming layer;
- (e) the protective layer has resin as a main component; and
- (f) the porous-body-forming layer has valve action metal powder and binder resin.

In accordance with features (d) and (e), the same effects as those of claim 1 can be obtained. Furthermore, the molding with a substratum of claim 2 is also a molding for sintering process, and the porous-body-forming layer has valve action metal powder and binder resin according to feature (f). Therefore, as in the case of claim 1, there is no teaching or suggestion of the features of the molding with a substratum according to claim 2 in the Taniguchi et al patent. Further, since claims 3 and 6-8 are dependent from claim 2 directly or indirectly, claims 3 and 6-8 are not anticipated by the Taniguchi et al patent.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of claims 1-3 and 6-8 over the cited Taniguchi et al patent are respectfully requested.

It is further submitted that the molding for an electrolytic capacitor anode element of claim 16 has the feature (g) that the valve action metal layer includes the valve action metal powder and the binder resin in the form of a mixture thereof. The molding with a substratum of claim 17 has the feature (h) that the porous-body-forming layer has the valve action metal powder and the binder resin in the form of a mixture thereof.

Since the anode member of the Ohi et al patent and the anode body of the Taniguchi et al patents are both sintered objects of valve metal powder, the features (g) and (h) are not disclosed in the Ohi et al and Taniguchi et al patents. That is, the Ohi and Taniguchi patents contain no description or suggestion of the molding for an electrolytic capacitor anode element before sintering which would render features (g) and (h) obvious.

Applicants acknowledge with appreciation the indication that claims 4-5 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claim and that claims 11-15 have been allowed.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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